# U.S. Global Change Research Program

Overview and Responsibility for Assessment

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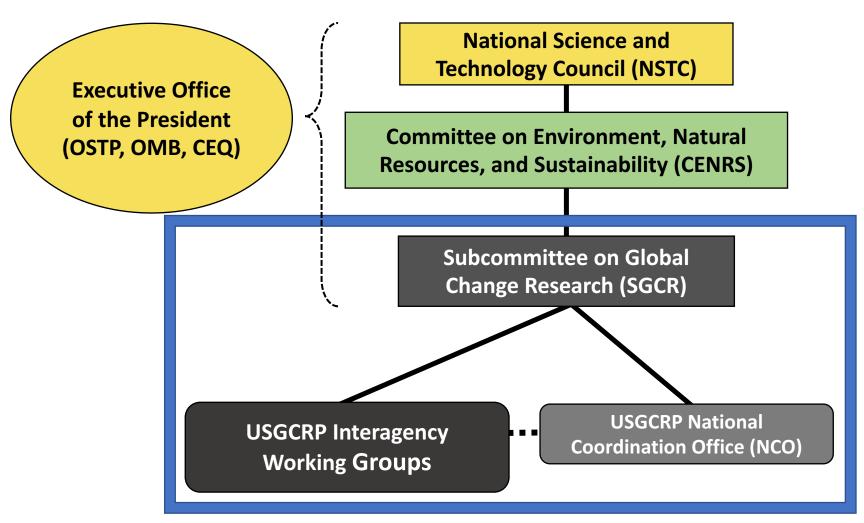
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# White House Office of Science and Technology Policy (OSTP)

- Established by Congress in 1976 to:
  - Advise the President and others within the Executive Office of the President on the effects of science and technology on domestic and international affairs
  - Lead interagency efforts to develop and implement sound science and technology policies and budgets
  - Work with the private sector; state, tribal, and local governments; the science and higher education communities; and other nations toward this end
- OSTP leads the National Science and Technology Council (NSTC) and co-chairs the Committee on Environment, Natural Resources and Sustainability (CENRS)
- The Subcommittee on Global Change Research (SGCR) is under CENRS





**U.S. Global Change Research Program** 

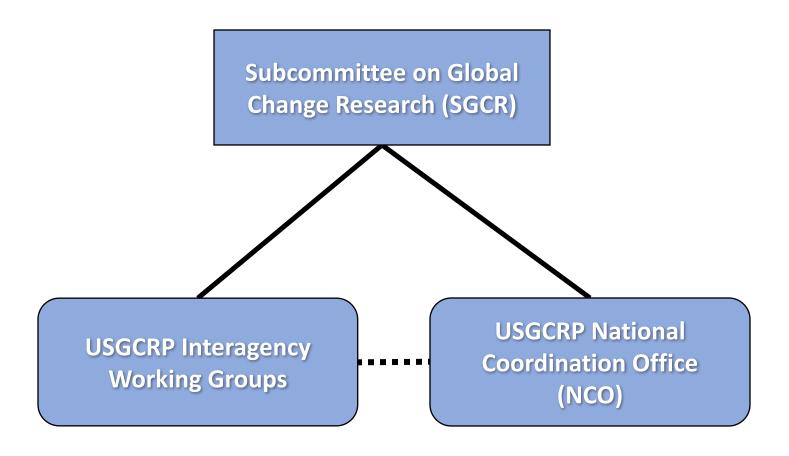


#### U.S. Global Change Research Program

- USGCRP began as a Presidential Initiative in 1989
- Mandated by Congress in the Global Change Research Act (GCRA) of 1990 (P.L. 101 606) "to assist the Nation and the world to understand, assess, predict and respond to human-induced and natural process of global change".
- Consists of the science arms of 13 agencies with responsibilities in global change
- FY 2015 budget crosscut \$2.459 billion
- Major coordination through Interagency Working Groups (IWGs), supported by the National Coordination Office (NCO)
- Interagency "Distributed Cost Budget" supports the NCO and activities of the organization



#### USGCRP at a glance





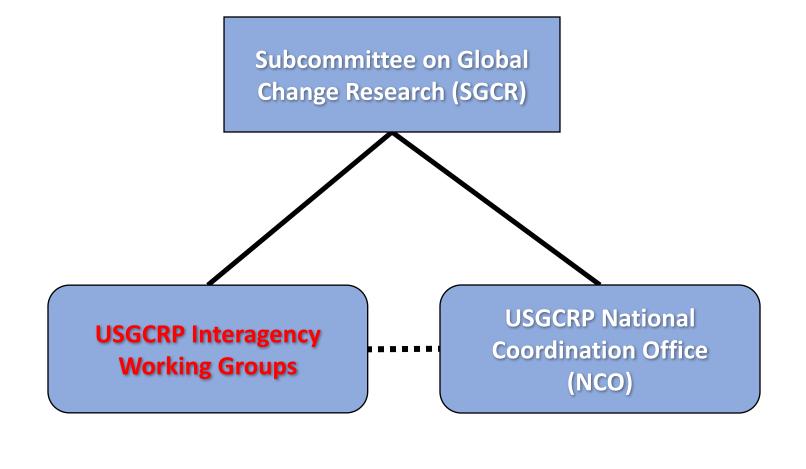
#### USGCRP at a glance

## Disciplinary Groups:

Carbon cycle
Observations
Modeling
Health
Social sciences
Education

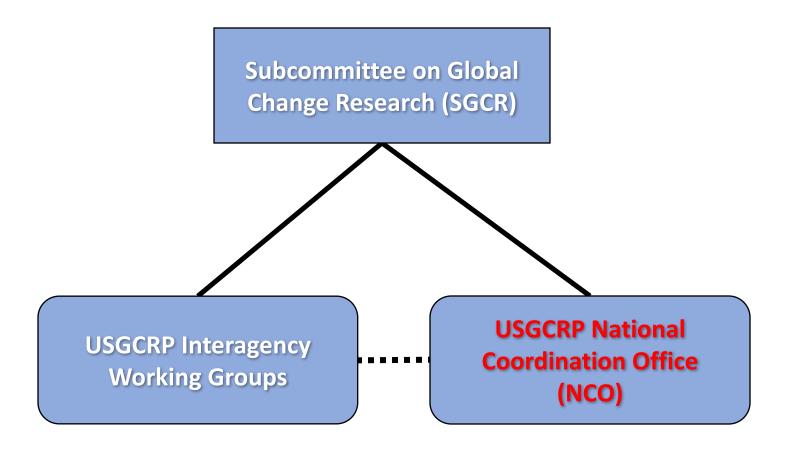
# Operational Groups:

International
Assessment
Indicators
Scenarios
Information system





#### USGCRP at a glance





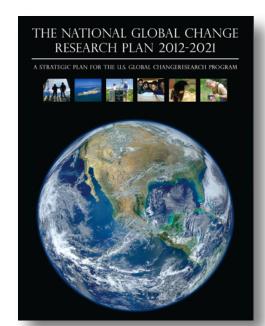
#### USGCRP Decadal Strategic Plan

**Overview**: http://globalchange.gov/what-we-do/strategic-planning

**Document**: http://library.globalchange.gov/u-s-global-change-research-program-strategic-

plan-2012-2021

#### 2012-2021 Strategic Plan Goals



- Goal 1 Advance Science: Advance scientific knowledge of the integrated natural and human components of the Earth system.
- Goal 2 Inform Decisions: Provide the scientific basis to inform and enable timely decisions on adaptation and mitigation.
- Goal 3 Conduct Sustained Assessments: Build sustained assessment capacity that improves the Nation's ability to understand, anticipate, and respond to global change impacts and vulnerabilities.
- **Goal 4 Communicate & Educate:** Advance communications and education to broaden public understanding of global change and develop the scientific workforce of the future.



#### Advance Science

- Earth System Understanding
- Science for Adaptation and Mitigation
- Integrated Observations
- Integrated Modeling
- Information Management and Sharing

USGCRP works to connect these approaches together to advance fundamental science, and to provide a science foundation for societal decision making

# Inform Decisions, Sustained Assessment, Communicate and Educate

- The "other side" of USGCRP, these goals work together, with the aim of making USGCRP science actionable and accessible.
- USGCRP assessments identify societal science needs and feed them into the Program's science planning and prioritization.
- Engagement—with those planning for and responding to climate change and with the science producing community is central to connecting across USGCRP's four goals in ways that serve the Nation.

#### **USGCRP** Priorities

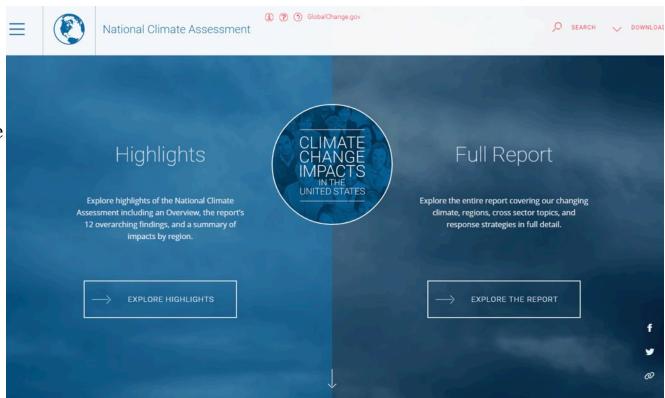
- Focus on activities that require or benefit from the engagement of multiple agencies
  - Arctic
  - Water cycle extremes
  - Carbon cycle: methane
- In addition, USGCRP recognizes key enabling capabilities upon which the program depends
  - Observations
  - Modeling
  - Actionable Science
- Encourage support from agencies and the administration for these priority areas



#### National Climate Assessment

- Summarizes current and future impacts of climate change
- Now a sustained process culminating in a quadrennial report
- Most recent NCA(3) released May 2014

All content in the 2014 National Climate Assessment is available in a dynamic format online.







THE IMPACTS OF CLIMATE CHANGE ON

### HUMAN HEALTH

IN THE UNITED STATES:

A SCIENTIFIC ASSESSMENT



# Circling back to USGCRP

- USGCRP represents the U.S. climate research enterprise
- Its goal "to assist the Nation and the world to understand, assess, predict and respond to human-induced and natural process of global change"
- Short-term help by providing information and connecting stakeholders with experts
- Long-term help through engagement to influence research investments